

SYSTEM, DEVICE, AND METHOD FOR INTERWORKING BETWEEN A
BROADBAND SS7 NETWORK AND AN INTERNET PROTOCOL NETWORK
TO PROVIDE TRANSPORT OF CONNECTION ORIENTED INFORMATION

ABSTRACT OF THE DISCLOSURE

A wireless communication system includes a radio node controller in an SS7 network that generates SS7 formatted information for transport in an Asynchronous Transfer Mode Permanent Virtual Circuit in response to communications with a mobile unit. A signaling gateway receives the SS7 formatted information on the Asynchronous Transfer Mode Permanent Virtual Circuit. The signaling gateway translates the SS7 formatted information into Internet Protocol information and maps the Asynchronous Transfer Mode Permanent Virtual Circuit to stream control transmission protocol endpoint and stream. A mobile switching center in an Internet Protocol network receives the Internet Protocol formatted information on the Stream Control Transmission Protocol stream and performs further processing thereof. By associating Asynchronous Transfer Mode Permanent Virtual Circuits with Stream Control Transmission Protocol endpoints and streams, the signaling gateway need not maintain connection states in order to allow a back up signaling gateway to continue passing information between the radio node controller and the mobile switching center in the event of a failure in the signaling gateway.